## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing Of Claims:**

Please amend the claims as follows:

- 1. (Currently Amended) A printer system comprising a printer adapted to print a digital location pattern to be read by an optical reading device comprising a plurality of dots, each having a substantially predetermined size and nominal position in the pattern, the printer having a resolution constraining the position at which the dots may are to be printed, the system further comprising a user interface component and a processing component being adapted to modify at least some of the dots prior to printing such that the optical centre of gravity of the modified dots more closely coincides with their nominal positions, wherein the printer said system is adapted to print said location pattern and human-discernible content on the same carrier.
- 2. (Original) A system according to claim 1, arranged to modify some of the dots prior to printing by changing shape of those dots from a nominal shape.
- 3. (Original) A system according to claim 1, arranged to modify some of the dots prior to printing by introducing an asymmetry into the shape of those dots.

- 4. (Original) A system according to claim 1, wherein the modification substantially does not alter the size of the dots.
- 5. (Currently Amended) A system according to claim 3, wherein the modified dot shape is substantially one from a set of an "L" shape or and substantially a "T" shape.
- 6. (Original) A system according to claim 1, wherein the nominal position of each dot of the pattern lies offset in one of a plurality of directions, such as above, below, to the left and to the right, from the intersection point of a virtual grid.
- 7. (Currently Amended) A system according to claim 6, wherein the modification of the dots has the effect of moving the optical centre of gravity of those dots in a first direction, one from a set of towards or and away from their nominal positions.
- 8. (Original) A system according to claim 7, wherein the modification of the dots has the additional effect of moving the optical centre of gravity of those dots in a second direction, perpendicular to the first direction.
- 9. (Previously Presented) A system according to claim 7, wherein dots offset from intersection points of a virtual grid in a first direction have a different shape and/or size compared to dots offset from intersection points of a virtual grid in a second direction.

- 10. (Previously Presented) A system according to claim 7, wherein dots offset from intersection points of a virtual grid in a first direction have the same shape and/or size as dots offset from intersection points of a virtual grid in a second direction.
- 11. (Original) A system according to claim 10, wherein dots offset in the first direction are rotations of dots offset in the second direction.
- 12. (Original) A system according to claim 11, wherein dots offset in the first direction are reflections of dots offset in the second direction.
- 13. (Original) A system according to claim 12, wherein dots offset in the first direction are combined rotations and reflections of dots offset in the second direction.
- 14. (Original) A system according to claim 1, wherein the printer is a digital printer.
- 15. (Original) A system according to claim 14, wherein the printer also functions as a photocopier.
- 16. (Currently Amended) A system according to claim 14, wherein the printer is one from a set of an inkjet printer, a LED printer, a LCD printers, or and a liquid electrophotographic printers.

- 17. (Original) A system according to claim 14, wherein the printer has a resolution approximately between 600 and 1200 dpi.
- 18. (Original) A system according to claim 1, wherein the dots are printed in IR absorbing ink.
- 19. (Cancelled)
- 20. (Cancelled)
- 21. (Currently Amended) A method of generating a <u>digital</u> location pattern comprising a plurality of dots <u>to be read by an optical reading device</u>, <u>the method</u> comprising the steps of: determining the nominal position of the dots in a pattern area; and, assigning an asymmetrical shape to at least some of the dots in the pattern area, independence upon the characteristics of given printer, such that when printed, the optical centre of gravity of those dots substantially coincides with the corresponding nominal positions, wherein said location pattern is adapted for printing with human-discernible content on the same carrier.
- 22. (Original) A method according to claim 21, further comprising the step of requesting pattern information from a pattern database.

23. (Currently Amended) A method according to claim 21, further comprising the steps of:

determining characteristics of the printer; and[[,]]
determining a necessity of whether or not the assigning step is required.

- 24. (Original) A method according to claim 21, further comprising the step of generating a print file of the pattern area, comprising at least some dots having the assigned asymmetrical shape.
- 25. (Original) A method according to claim 24, further comprising the step of printing the print file on the given printer.
- 26. (Original) A method according to claim 21, comprising the step of explicitly defining the shape of the at least some of the dots in the native resolution of the printer.
- 27. (Original) A method according to claim 26, wherein the shape of the at least some of the dots is defined using anyone of a bit map, a font set, or a high level programming language.
- 28. (Cancelled)
- 29. (Currently Amended) A printer system comprising a printer and <u>a computing</u> component, wherein the printer is adapted to print a digital location pattern to be read by

an optical reading device, the pattern comprising a plurality of dots, and the computing component the system being is arranged to introduce an asymmetry into the shape of at least some of dots prior to printing the pattern, and wherein the printer said system is adapted to print said location pattern and human-discernible content on the same carrier.

- 30. (Currently Amended) A printer system adapted to print a <u>digital</u> location pattern to be read by an optical reading device comprising a plurality of dots each offset from a nominal position in one of a plurality of directions, <u>a computing component of</u> the system being arranged to modify the degree of offset of each dot from its nominal position by modifying the shape of each dot, wherein <u>a printer of the said</u> system is adapted to print said location pattern and human-discernible content on the same carrier.
- 31. (Currently Amended) A printer system adapted to print a <u>digital</u> location pattern to be read by an optical reading device comprising a plurality of dots, the dots having a first dimension lying between predetermined limits and each dot having an optical centre of gravity located at [[a]] predetermined nominal positions in the pattern, <u>a computing component of</u> the system being adapted to modify the pattern prior to printing by introducing an asymmetry to the dot shape of selected dots, substantially without causing the first dimension to exceed its predetermined limits, such that when printed on a preselected printer the optical centre of gravity of the selected dots more closely coincides with their corresponding nominal positions, wherein the pre-selected printer of the said system is adapted to print said location pattern and human-discernible content on the same carrier.

32. (Currently Amended) A <u>digital</u> location pattern <u>to be read by an optical reading</u> <u>device</u> arranged for use with a system comprising a pattern space having a plurality of dots each having a nominal position, the pattern having a plurality of dots, at least some of which having an asymmetric shape, having no more than one axis of symmetry, the asymmetric shape causing the optical centre of gravity of those dots to be located substantially at the corresponding predetermined nominal position, wherein said <u>digital</u> location pattern is adapted for printing with human-discernible content on the same carrier.